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caprolactone = 95.5% by weight, Mn = 23 100. poly(1-hexene) block is isotactic (mm > 95%).

Example 10:

is repeated, procedure of example replacing the 1-hexene by 3 ml of 1-pentene and the caprolactone by 3 ml of MMA. 0.56 g of polymer is recovered, corresponding to an activity of 5.6 g of polymer/g of catalyst, said polymer possessing the following characteristics: proportion of 1-pentene = 13.5% by weight, proportion of caprolactone = 86.5% by Mn = 54700. The poly(1-pentene) block is isotactic (mm > 95%).

Example 11:

procedure of example is repeated, 9 The replacing catalyst B by 100 mg of catalyst C. 0.52 g of polymer is collected, corresponding to an activity of 5.2 g of polymer/g of catalyst, said polymer possessing the following characteristics: proportion of 1-hexene = 50% by weight, proportion of caprolactone = 50% by The poly(1-hexene) block $Mr_1 = 6.800.$ weight, 20 isotactic (mm > 95%).

Example 12:

procedure of example 9 is repeated, The replacing catalyst B by 100 mg of catalyst C and the caprolactone by 2 ml of MMA. 0.25 g of polymer is collected, corresponding to an activity of 2.5 g of polymer/g of catalyst, said polymer possessing the following characteristics: proportion of 1-hexene = 52% by weight, by weight, proportion of 48% AMM Mn = 12 000. The poly(1-hexene) block is isotactic (mm > 95%).

Example 13:

repeared, of example 10 is procedure The replacing catalyst B by 100 mg of catalyst C. 0.41 g of polymer is collected, corresponding to an activity of 4.1 g of polymer/g of catalyst, said polymer possessing the following characteristics: proportion of 1-pentene = 91% by weight, proportion of MMA = 9% by weight,

Mn = 6 200. The poly(1-pentene) block is isotactic (mm > 95%).

The invention is not limited to the embodiments described, but is capable of numerous variations which are readily accessible to the skilled worker. 5